

# VISION ZERO CONFERENCE

STOCKHOLM  
26-27 JUNE 2023

TAKING ROAD  
**SAFETY**  
TO THE NEXT LEVEL



<https://bransch.trafikverket.se/en/visionzero/vision-zero-conference-2023/about-vision-zero-conference/>

## Main topics

- Vision Zero in a rapidly changing world
- The 2030 Agenda as an enabler for road safety and vice versa
- Private sector role and engagement
- Knowledge transfer and capacity building
- Safe modal shift including safety for powered two-wheelers
- New technologies and innovations

# **The relevance of including minor and moderate injuries to support the SDGs:**

**Widening the scope of SDGs 3.6 and 11.2 to implement the vision of a society without health losses from road traffic injuries.**

**Hans Berg and Luciana Iorio**

# In a resolution from 2020 UN General Assembly, proclaims a new goal of reducing fatalities and injuries by at least 50% between 2021–2030. Why focus on injuries?

- Road traffic deaths and injuries are a social equity issue, as the poor and the vulnerable are most frequently at risk
- Mortality alone do not show the full consequences on health and societal and economic consequences costs caused by road traffic injuries (RTIs)
- Death rates and life-changing injuries represent a significant socioethical impact on the community

# Although.....

Scientific knowledge show:

- Relatively minor non-fatal injury incidents, and not only major events, can lead to a significant consequences for injured individuals, families and societies

But: These injuries are usually not included in many countries road safety efforts due to the fact that they are usually not life threatening and by this not regarding as “serious” ....

# „Threat-to-life”

## MAIS 3+ EU definition of serious road traffic injuries since 2014

**AIS** (Abbreviated Injury Scale)

1971, updated several times, latest 2015

Injuries are categorized by nine different body parts and it's severity.

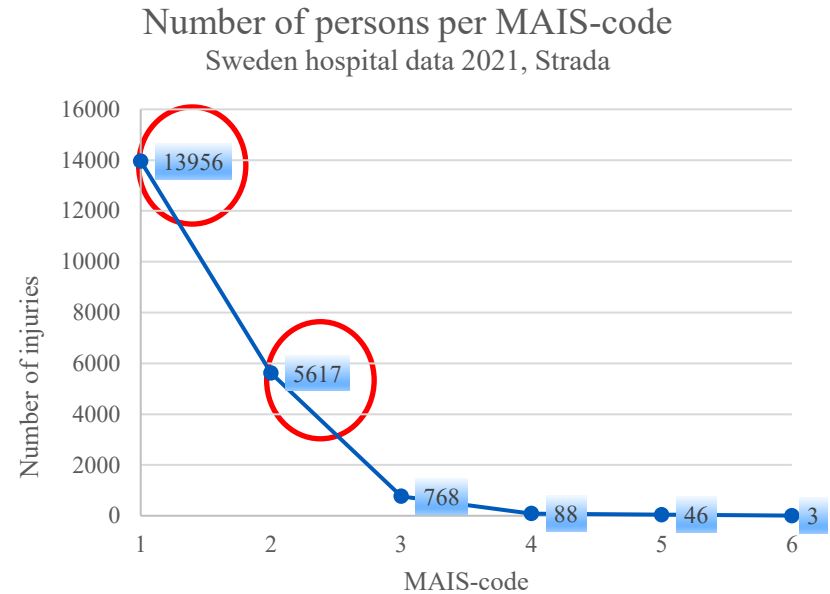
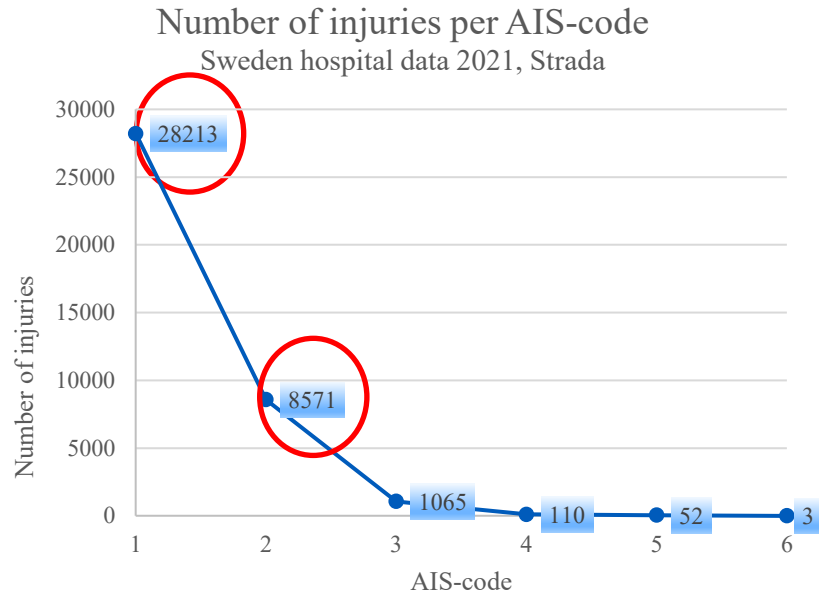
Abbreviated injury Score

AIS-Code ▲	Injury ⇄	Example ⇄	AIS % prob. of death ⇄
1	Minor	superficial laceration	0
2	Moderate	fractured sternum	1 – 2
3	Serious	open fracture of humerus	8 – 10
4	Severe	perforated trachea	5 – 50
5	Critical	ruptured liver with tissue loss	5 – 50
6	Maximum	total severance of aorta	100
9	Not further specified (NFS)		

**MAIS** (Maximum AIS)

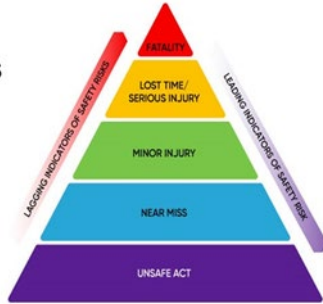
The highest AIS-score

# Distribution of injuries and injured persons by AIS and MAIS in Strada, 2021



# If using that MAIS 1 and 2 are “minor-moderate” injuries and MAIS 3-6 “serious – critical/maximum” injuries.....

Heinrich's Triangle Theory



The Swedish Ratios number of "minor-moderate" and "serious – critical/maximum" injured by number of fatalities (210) from 2021 are:

"Minor-moderate":  $19\ 573/210 = 93$

"serious – critical/maximum":  $905/210 = 4.3$

As an example using Swedish ratios:

WHO has estimated road traffic fatalities in the Global Status Report on Road Safety 2018: Italy 3 333, Tanzania 16 252, USA 39 888, Viet Nam 24 970

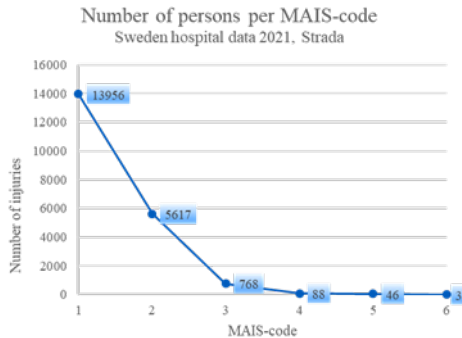
"Minor-Moderate" vs. "Serious-Critical/Maximum"

Italy: 310 000 and 14 300

Tanzania: 1 511 000 and 69 000

USA: 3 700 000 and 172 000

Viet Nam: 2 300 000 and 107 000



"Threat-to-life"

MAIS 3+ IT definition of serious road traffic injuries since 2014

MAIS Code	Definition	ICD-10 Code	ICD-10 Description
3	Fracture of skull, face, or neck	S00-S09	Injury to head, face and neck
4	Fracture of arm, forearm, or hand	S10-S19	Injury to arm, forearm and hand
5	Fracture of leg, forearm, or hand	S20-S29	Injury to trunk, upper limb and hand
6	Fracture of hip, femur, or tibia	S30-S39	Injury to lower limb
7	Fracture of pelvis, femur, or tibia	S40-S49	Injury to lower limb
8	Fracture of femur, tibia, or fibula	S50-S59	Injury to lower limb
9	Fracture of tibia, fibula, or foot	S60-S69	Injury to lower limb
10	Fracture of foot, ankle, or toe	S70-S79	Injury to lower limb

MAIS (Minimum AIS): The highest AIS-score

# Highlighting the topic at two Imola Living Lab events in July and December 2022

Held at the Autodromo Enzo and Dino Ferrari premises in Imola, with the collaboration of Montecatone Rehabilitation Institute, Bellaria and Maggiore Hospital for Spinal injuries, the traffic police and psychology experts.

Con il supporto incondizionato di:

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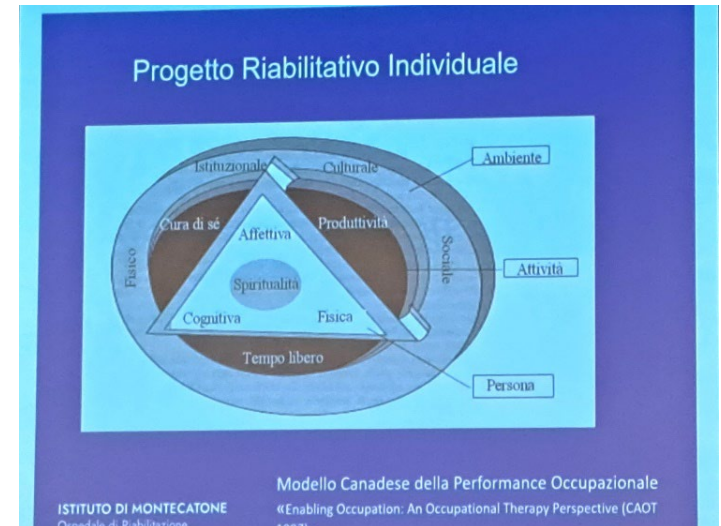
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**IMOLA**  
LIVING LAB

IMOLA LIVING LAB  
L'INNOVAZIONE AL SERVIZIO DELLA RIABILITAZIONE

**La cultura inclusiva nella governance della mobilità  
sicura, inclusiva e sostenibile**

02/12/2022  
Imola, Autodromo Internazionale Enzo e Dino Ferrari





# ECE Road Safety Action Plan 2023-2030

## Economic Commission for Europe

### Inland Transport Committee

Eighty-fifth session  
Geneva, 21-24 February 2023  
Item 4 of the provisional agenda  
Governance Issues and other Matters Arising  
from the United Nations Economic Commission for Europe,  
the Economic and Social Council  
and other United Nations bodies and Conferences

### Draft Economic Commission for Europe Road Safety Action Plan 2023 – 2030

#### Note by the secretariat\*

#### Summary

The Committee may wish to recall that it requested at its eighty-fourth session the secretariat to develop a revised United Nations Economic Commission for Europe (ECE) Road Safety Action Plan for the Decade of Action for Road Safety 2021-2030, for consideration and possible adoption by the Committee at its eighty-fifth session. This decision followed the completion of the first ECE Road Safety Action Plan in 2020, following the end of the first Decade of Action for Road Safety.

The Committee may wish to consider and approve the revised "ECE Road Safety Action Plan, 2023-2030", as contained in ECE/TRANS/2023/7 and invite its relevant Working Parties to submit in the course of 2023 their inputs to the secretariat in the corresponding areas of the action plan that are relevant to their work and contributions.

ECE/TRANS/2023/7

## Annex

### Areas of Action

#### Monitoring

##### Suggestions by the secretariat:

WHO Road Safety Reports

National road safety statistics

Working parties provide input here:

#### (a) Indicators

##### Suggestions by the secretariat:

Road crash fatalities (killed per 100,000 population)

Road crash injuries (serious injuries (MAS3) per 100,000 population)

Working parties provide input here:

# Conclusion and suggestions

- For policy making and regulation it is essential to pay attention to the fact that negative life consequences of RTIs can be long-term and can arise even for minor injuries and minor injurious events (MAIS 1 & 2)
- A focus shift is needed from premature deaths to (also) all injuries as these cause negative life long-term consequences for individuals and societies
- In Agenda 2030 health is a central goal – traffic safety need to be incorporated in to societal development
- ECE Road Safety Action Plan 2023-2030 uses MAIS3+ as an indicator
- WP.1 is invited to discuss this topic – eg. what can The Global Forum For Road Traffic Safety do to counteract the societal burden of minor and moderate road traffic injuries?

**Thank you!**